NPDES Permit No. IL0000205
Notice No. FLR:02073103.bah

Public Notice Beginning Date:

Public Notice Ending Date:

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water,
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

ConocoPhillips Wood River Refinery
P.O. Box 76
Roxana, Illinois 62084

Name and Address of Facility:

ConocoPhillips Wood River Refinery
900 South Central Avenue
Roxana, Illinois 62084
(Madison County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicates a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Fred Rosenblum at 217/782-0610.

The applicant is engaged in the operation of a petroleum refinery to produce gasolines, fuel oil, asphaltic products and propane (SIC 2911). They currently process approximately 310,000 barrels of crude oil per stream day. The lube processing units were removed in 1999. Upon commencement of operation and integration of the former Premcor Hartford Refinery units, the crude oil processing capability will be approximately 323,000 barrels of crude oil per stream day. Wastewater is generated by the use of on-site wells in the generation of process wastewater, and municipal potable water for the generation of the sanitary wastewater. Plant operation results in an average discharge of 7.09 MGD of treated process, sanitary and stormwater (including effluent from the Village of Roxana STP and Air Liquide) at outfall 001; 6.84 MGD of treated process, sanitary and stormwater (including effluent from Air Liquide) at outfall 002; and intermittent discharge of stormwater runoff from the southwest property at outfall 003; stormwater runoff from the north drainage ditch (docks area) at outfall 004; stormwater runoff from the east drainage ditch (docks area) at outfall 005; stormwater runoff from the north drainage ditch (docks area) at outfall 006; stormwater runoff from the south drainage ditch (docks area) at outfall 007; and stormwater runoff from the southwest paved road (docks area) at outfall 008. Outfall 003 stormwater runoff from southwest property includes stormwater flows from portions of the main, north, west and southwest properties, as well as adjacent off-property areas.

The commencement of operation and integration of the former Premcor Hartford Refinery units will increase the average discharge at outfall

001 to 7.49 MGD and the average discharge at outfall 002 to 7.24 MGD.
The provisions of the Petroleum Refining Point Source Category (40 CFR 419) apply to the refinery operations. The provisions of Subpart D-Lube Subcategory of 40 CFR 419 previously applied to the refinery operations. Following removal of the lube processing units, the provisions of Subpart B-Cracking Subcategory of 40 CFR 419 now apply to the refinery operations and will be used to calculate the production based load limits (lbs/day).

Cyanide, chloride, total dissolved solids and sulfate are monitored/reported and limited at outfall(s) 001 and 002 in the current NPDES Permit; these parameters will not be monitored/reported or limited in the reissued permit, since there is no reasonable potential for these parameters to violate the applicate state effluent standards in 35 IAC 304 and water quality standards in 35 IAC 302.

Application is made for existing discharge(s) which are located in Madison County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Mississippi River	38^0 50' 25"	North	90^0 06' 15"	West	General Use	Not Rated
002	Mississippi River	38^0 50' 24"	North	90^0 06' 08"	West	General Use	Not Rated
003	Unnamed Ditch Tributary to Little Grassy Lake Tributary to Mississippi River	38^0 49' 40"	North	90^0 04' 03"	West	General Use	Not Rated
004	Mississippi River	38^0 50' 35"	North	90^0 06' 14"	West	General Use	Not Rated
005	Mississippi River	38^0 50' 25"	North	90^0 06' 14"	West	General use	Not Rated
006	Mississippi River	38^0 50' 27"	North	90^0 06' 14"	West	General use	Not Rated
007	Mississippi River	38^0 50' 13"	North	90^0 06' 15"	West	General use	Not Rated
008	Mississippi River	38^0 50' 13	North	90^0 06' 15"	West	General use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment receiving the discharge from outfall(s) 001, 002, & 004 - 008 is on the 303 (d) list of impaired waters. The stream segment receiving the discharge from outfall(s) 003 is not on the 303 (d) list impaired waters. The following parameters have been identified as the pollutants causing impairment:

Pollutants	Potential Contributors
PCB's, Siltation, Suspended Solids, Metals, Nutrients, Phosphorus, Inorganic N (Nitrates), Nitrates	Industrial Points Source, Municipal Point Sources, Agriculture, Crop Related Sources, Non-Irrigated Crop Production, Hydrologic/Habitat Modification, Sources Unknown

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						35 IAC 309.146
pH	Shall be in the range of 6 to 9 standard units*					35 IAC 304.125
Temperature						35 IAC 303.351(b)
BOD_5	1249	4761	35 IAC 304.120 & 309.143	20	40	35 IAC 304.120 & 309.143
Total Suspended Solids (TSS)	2452	4085	35 IAC 304.120 & 309.143 & 40 CFR 419.22	25	50	35 IAC 304.120 & 309.143 & 40 CFR 419.22
Oil & Grease	867.1	1626	35 IAC 304.124 & 309.143 & 40 CFR 419.22	15	30	35 IAC 304.124 & 309.143 & 40 CFR 419.22
COD	20980	40968	40 CFR 419.22 & 419.23 & 35 IAC 304.120 & 309.143	--	--	
Phenols	16.69	40.11	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23	0.3	0.6	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23
Ammonia (as N)	1635	3600	40 CFR 419.22 & 419.23 & 35 IAC 309.143	--	--	
Sulfides	15.72	35.23	40 CFR 419.22 & 419.23	--	--	
Chromium (Total)	18.59	53.48	35 IAC 304.124 & 309.143 & 40 CFR 419.23	1.0	2.0	35 IAC 304.124 & 309.143 & 40 CFR 419.23
Chromium (Hexavalent)	1.53	3.42	35 IAC 304.124 & 309.143 & 40 CFR 419.23	0.1	0.2	35 IAC 304.124 & 309.143 & 40 CFR 419.23

The above limits for outfall 001 apply only during months when there is a discharge from outfall 001 and not outfall 002.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall(s): 002

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						35 IAC 309.146
pH	Shall be in the range of 6 to 9 standard units					35 IAC 304.125
Temperature						35 IAC 303.351(b)
BOD_5	1208	4552	35 IAC 304.120 & 309.143	20	40	35 IAC 304.120 & 309.143
Total Suspended Solids (TSS)	2388	3743	35 IAC 304.120 & 309.143 & 40 CFR 419.22	25	50	35 IAC 304.120 & 309.143 & 40 CFR 419.22
Oil & Grease	867.1	1626	35 IAC 304.124 & 309.143 & 40 CFR 419.22	15	30	35 IAC 304.124 & 309.143 & 40 CFR 419.22
COD	20821	40190	40 CFR 419.22 & 419.23 & 35 IAC 304.120 & 309.143	--	--	
Phenols	16.69	40.11	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23	0.3	0.6	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23
Ammonia (as N)	1626	3579	40 CFR 419.22 & 419.23 & 35 IAC 309.143	--	--	
Sulfides	15.72	35.23	40 CFR 419.22 & 419.23	--	--	
Chromium (Total)	18.59	53.48	35 IAC 304.124 & 309.143 & 40 CFR 419.23	1.0	2.0	35 IAC 304.124 & 309.143 & 40 CFR 419.23
Chromium (Hexavalent)	1.53	3.42	35 IAC 304.124 & 309.143 & 40 CFR 419.23	0.1	0.2	35 IAC 304.124 & 309.143 & 40 CFR 419.23

The above limits for outfall 002 apply to outfall 002 only during months when there is a discharge from outfall 002 and not outfall 001.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001/002

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						35 IAC 309.146
pH	Shall be in the range of 6 to 9 standard units*					35 IAC 304.125
Temperature						35 IAC 303.51(b)
BOD_5	1249	4761	35 IAC 304.120 & 309.143	20	40	35 IAC 304.120 & 309.143
Total Suspended Solids (TSS)	2452	4085	35 IAC 304.120 & 309.143 & 40 CFR 419.22	25	50	35 IAC 304.120 & 309.143 & 40 CFR 419.22
Oil & Grease	867.1	1626	35 IAC 304.124 & 309.143 & 40 CFR 419.22	15	30	35 IAC 304.120 & 309.143 & 40 CFR 419.22
COD	20980	40968	40 CFR 419.22 & 419.23 & 35 IAC 304.120 & 309.143	--	--	
Phenols	16.69	40.11	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23	0.3	0.6	35 IAC 304.124 & 309.143 & 40 CFR 419.22 & 419.23
Ammonia (as N)	1635	3600	40 CFR 419.22 & 419.23 & 35 IAC 309.143	--	--	
Sulfides	15.72	35.23	40 CFR 419.22 & 419.23	--	--	
Chromium (Total)	18.59	53.48	35 IAC 304.124 & 309.143 & 40 CFR 419.23	1.0	2.0	35 IAC 304.124 & 309.143 & 40 CFR 419.23
Chromium (Hexavalent)	1.53	3.42	35 IAC 304.124 & 309.143 & 40 CFR 419.23	0.1	0.2	35 IAC 304.124 & 309.143 & 40 CFR 419.2

The above limits for outfall(s) 001/002 apply to outfall 001/002 only during months when there is a discharge from both outfall 001 and 002.

*The pH 9 maximum limit may be exceeded at outfall 001 if the elevated pH level is caused entirely by algae in the treatment lagoon(s) that discharge to outfall 001.

Flow monitoring and reporting will be required at outfalls 001 and 002.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 003

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
pH	Shall be in the range of 6 to 9 standard units*					35 IAC 304.125
Oil & Grease				--	15	40 CFR 419.22(e)
TOC				--	110	40 CFR 419.22(e)

*The pH 9 maximum limit may be exceed if the elevated pH level is caused entirely by algae in the storm water retention area that discharges to outfall 003.

Outfall(s): 004, 005, 006, 007 and 008

A Storm Water Pollution Prevention Plan (SWPPP) applies to storm water at outfalls 004-008.

Load Limit Calculations:

A. Load limit calculations for the following pollutant parameters were based on an average flow of 7.49 MGD at outfalls(s) 001 and 001/002 and 7.24 MGD at outfall 002, and a maximum flow of 14.27 MGD at outfall(s) 001 and 001/002 and 13.645 MGD at outfall 002, and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD_5, TSS, oil & grease, and phenols. The average and maximum flow used to calculate the State load limits at outfall 002 were determined by excluding the City of Roxana STP flow, which is not part of outfall 002. The average and maximum flows used to calculate the load limits at outfall 002 are as follows: Average flow for outfall 002 = 7.49 MGD - 0.25 MGD = 7.24 MGD; and maximum flow for outfall 002 = 14.27 MGD - 0.625 MGD = 13.645 MGD.

   Load limit calculations for chromium (total) and chromium (hexavalent) were based on the current flows at outfalls 001 and 002, prior to commencement of operation and integration of the former Premcor Hartford Refinery Units, and using the above formula. Load limit calculations for chromium (total) and chromium (hexavalent) were based on an average flow of 7.09 MGD at outfall(s) 001 and 001/002 and 6.84 MGD at outfall 002; and a maximum flow of 14.27 MGD at outfall(s) 001 and 001/002 and 13.645 MGD at outfall 002.

B. Production based load limits were calculated at outfall(s) 001 and 002 by multiplying the average production by the effluent limit contained in 40 CFR 419. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory	Production Rate
Subpart B - Cracking	323,000 barrels of crude oil per stream day

Total suspended solids (TSS), oil & grease, COD, phenols, ammonia (as N), sulfides, chromium (total) and chromium (hexavalent) were limited using Federal production based load limits. The following sample calculations show the methodology utilized to determine production based load limitations:

The BPT load limits (40 CFR 419.22) were determined using the size factor, process factor and average production (barrels per stream day), as well as the BPT effluent limitations factor in lbs/1,000 barrels. The BPT load limits (lbs/day) for oil & grease at outfalls 001 and 002 are calculated as follows:

30-Day Average for Oil & Grease:
(1.6 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) = 867.1 lbs/day

Daily Maximum for Oil & Grease:
(3.0 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) = 1,626 lbs/day

The size factor used to determine the BPT load limits is based on the total barrels of feedstock per stream day. The process factor was

determined based on the process configuration, which was determined based on the average production in barrels per day (bbl/day) for the various refinery processes.
The BPT load limits for the indicated parameters (except for chromium (total) and chromium (hexavalent)) were based on a production rate of 323,000 barrels of crude oil per stream day. The BPT load limits for chromium (total) and chromium (hexavalent) were based on the current production rate of 310,000 barrels of crude oil per stream day.

Also, the contribution of domestic wastewater from the City of Roxana STP and Air Liquide STP was taken into account in calculating the BPT (40 CFR 419.22) load limits for BOD_5, TSS, COD and ammonia (as N) at outfall(s) 001 and 001/002; and the contribution of domestic wastewater from the Air Liquide STP was taken into account in calculating the BPT load limits for those parameters at outfall 002. Outfall 001 is the discharge from the polishing lagoons, and outfall 002 is the wastewater treatment plant discharge when the polishing lagoons are bypassed. The BPT load limit calculations for the above listed parameters were based on the production (bbl/day), the BPT effluent limitations factor (lbs/1,000 bbl), size factor and process factor, as well as the contribution of domestic wastewater from the indicated sewage treatment plants. The contribution of domestic wastewater from the Roxana STP and Air Liquide STP for outfall 001, in performing the load limit calculation for the indicated parameters, was based on an average flow of 0.27 MGD and a maximum flow of 0.69 MGD and using the formula of average or maximum flow (MGD) x average or maximum concentration (mg/L) x 8.34. The contribution of domestic wastewater from the Air Liquide STP for outfall 002, in performing the load limit calculations for the indicated parameters, was based on an average flow of 0.016125 MGD and a maximum flow of 0.067725 MGD and using the formula of average or maximum flow (MGD) x average or maximum concentration (mg/L) x 8.34.

The BPT load limits (lbs/day) for TSS, COD and ammonia (as N) at outfall 001 are calculated as follows:

30-Day Average for TSS:
(4.4 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.27 MGD x 30 mg/L x 8.34) = 2,452 lbs/day

Daily Maximum for TSS:
(6.9 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.69 MGD x 60 mg/L x 8.34) = 4,085 lbs/day

30-Day Average for COD:
(38.4 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.27 MGD) x 75 mg/L x 8.34) = 20,980 lbs/day

Daily Maximum for COD:
(74 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.69 MGD) x 150 mg/L x 8.34) = 40,968 lbs/day

30-Day Average for Ammonia (as N):
(3.0 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.27 MGD x 4 mg/L x 8.34) = 1,635 lbs/day

Daily Maximum for Ammonia (as N):
(6.6 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.69 MGD 4 mg/l x 8.34) = 3,600 lbs/day

The BPT load limits (lbs/day) for TSS, COD and Ammonia (as N) at outfall 002 are calculated as follows:

30-Day Average for TSS:
(4.4 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.016125 MGD x 30 mg/L x 8.34) = 2,388 lbs/day

Daily Maximum for TSS:
(6.9 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.067725 MGD x 60 mg/L x 8.34) = 3,743 lbs/day

30-Day Average for COD:
(38.4 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.016125 MGD x 75 mg/L x 8.34) = 20,821 lbs/day

Daily Maximum for COD:
(74 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.067725 MGD x 150 mg/L x 8.34) = 40,190 lbs/day

30-Day Average for Ammonia (as N):
(3.0 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.016125 MGD x 4 mg/L x 8.34) = 1,626 lbs/day

Daily Maximum for Ammonia (as N):
(6.6 lbs/1,000bbl) x (323,000 bbl/day) x (1.41) x (1.19) + (0.067725 MGD x 4 mg/L x 8.34) = 3,579 lbs/day

The BPT load limits for outfall(s) 001/002 apply to outfall(s) 001/002 only during months when there is a discharge from both outfall 001 and 002, and are the same as those for outfall 001 during months when there is a discharge from outfall 001 and not outfall 002.

The BAT load limits (40 CFR 419.23) at outfall 001 and 002 were determined using the average production (bbl) for the various refinery processes and the BAT effluent limitation factor. The current average production for the refinery processes is as follows: Crude-718,000 bbl/day, Cracking & Coking-254,500 bbl/day; Asphalt-45,000 b bl/day; and Reforming an Alkylation-116,000 bbl/day. Upon commencement of operation and integration of the former Premcor Hartford Refinery Units, the average production for the refinery processes will be as follows: Crude - 772,000 bbl/day; Cracking & Coking - 277,500 bbl/day; Asphalt - 42,000 bbl/day; and Reforming and Alkylation - 112,000 bbl/day.
The following sample calculations for Chromium (total) show the methodology utilized to determine the BAT production based load limits.

The BAT production based load limits for Chromium (Total), based on current production figures, are as follows:

30-Day Average for Chromium (Total):
(718) x (0.004) + (254.5) x (0.041) + (45) x (0.022) + (116) x (0.037) = 18.59 lbs/day

Daily Maximum for Chromium (Total):
(718) x (0.011) + (254.5) x (0.119) + (45) x (0.064) + (116) x (0.107) = 53.48 lbs/day

The BAT production based load limits for phenols, based on production figures from when the former Premcor Hartford Refinery Units are integrated and commence operation, are as follows:

30-Day Average for Phenols:
(772) x (0.003) + (277.5) x (0.036) + (42) x (0.019) + (112) x (0.032) = 16.69 lbs/day

Daily Maximum for Phenols:
(772) x (0.013) + (277.5) x (0.147) + (42) x (0.079) + (112) x (0.132) = 68.93 lbs/day

The BAT effluent limitation factors used in the above calculation are in lbs/1,000 bbl. The average production figures used in the BAT effluent load limit calculations are in 1,000 bbl/day. The refinery processes include crude, cracking and coking, asphalt, and reforming and alkylation. The crude processes include atmospheric distillation, vacuum distillation and crude oil desalting. The cracking and coking processes include catalytic cracking, coking, hydrocracking and hydrotreating.

The BAT and BPT load limits are the same for COD, ammonia (as N) and sulfides at the indicated outfall(s).

The BAT and BPT load limits for chromium (total) and chromium (hexavalent) are based on current production figures; the BAT and BPT load limits for the other parameters are based on the refinery thru-puts when the former Premcor Hartford refinery units are integrated and commence operation.

Additional storm water credit for the following parameters at outfalls 001 and 002 shall be based on the quantity of storm water flow taken through process treatment:

Pounds per 1,000 Gallons of Storm Water Flow*

Parameter	30-Day Average	Daily Maximum
TSS**	----	0.28
COD	1.5	3.0
Oil & Grease**	0.067	0.13
Phenols**	0.0014	0.0029
Chromium (Total)**	0.0018	0.0050
Chromium (Hexavalent)**	0.00023	0.00052

Dry Weather Flow: The average flow from the wastewater treatment facility for the last three consecutive precipitation days. Previously collected stormwater which is sent to process treatment during this period shall not be included in this computation.

*Stormwater flows: The stormwater runoff which is treated in the wastewater treatment facility is that portion of flow greater than the dry weather flow. Measurement of contaminated stormwater from the tank dike areas and previously collected may also be used in computing stormwater credit.

The stormwater credit does not allow the Permittee to exceed the concentration limits contained in the effluent limitations and monitoring pages.

In computing the monthly average permit limits to include stormwater credit, the mass credit calculated shall be averaged along with process load limits over the 30 day period. Explanatory calculations and flow data shall be submitted with the Discharge Monitoring Reports.

**The Permittee shall not exceed the following load limits at any time during months when there is a discharge from outfall 001 and not outfall 002, and during months when there is a discharge from both outfalls 001 and 002:

Parameter	30 Day Average (Lbs/Day)	Daily Maximum (Lbs/Day)
TSS	2452	5951
Oil & Grease	937	3570
Phenols	18.74	71.4
Chromium (Total)	59.13	238
Chromium (Hexavalent)	5.91	23.8

**The Permittee shall not exceed the following load limits at outfall 002 at any time during months when there is a discharge from outfall 002 and not outfall 001:

Parameter	30 Day Average (Lbs/Day)	Daily Maximum (Lbs/Day)
TSS	2388	5690
Oil & Grease	906	3414
Phenols	18.11	68.3
Chromium (Total)	57.05	228
Chromium (Hexavalent)	5.71	22.8

The load limits appearing in the permit will be more stringent of the State and Federal Guidelines. The BPT and BAT load limits for chromium (total) and chromium (hexavalent) were based on current production rates, and the State load limits for chromium (total) and chromium (hexavalent) were based on current flows, due to the fact that chromium is not used and can not be permitted for the increased loadings that will result from the commencement of operation of the former Premcor Hartford Refinery units. The BAT, BPT and State load limits for the other indicated parameters will be based on the production rates and flows when the former Premcor Hartford Refinery units have commenced operation, which is expected to occur upon permit reissuance. See Antidegradation Assessment (attached).

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

These facilities have treatment prior to discharge and will continue to be required to be operated by a Class K operator. The bypass and upset provisions in 40 CFR 122.41 ((m) and (n)) are applicable to the permit. The permit will require the Permittee to prepare a preliminary biomonitoring plan, and to conduct biomonitoring of the effluent from outfall 001 in the form of acute toxicity testing on fish and invertebrate. The Permittee will be required to determine the quantity of waste activated sludge produced by the treatment facility, maintain adequate records of these quantities, and submit to the Agency semi-annual reports (at a minimum) of the quantities of the waste activated sludge generated and disposed of by different disposal methods. Discharge credits, if necessary, for contaminated storm water are applied to the discharge at outfalls 001 and 002 as indicated in the special condition on storm water credits: additional stormwater credit for the indicated parameters is based on (pounds per 1,000 gallons of stormwater flow); the Permittee shall not exceed the load limits specified in the special condition on stormwater credits at any time for the indicated parameters. A Storm Water Pollution Prevention Plan (SWPPP) applies to storm water from outfalls 004-008. The effluent limitations in this permit constitute BAT/BCT for treated stormwater (outfalls 001, 002 and 003) for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water; the Permittee will be required to conduct an annual inspection of the facility site to identify areas contributing to a stormwater discharge associated with industrial activity, in addition to the chemical specific monitoring required in the permit. The Permittee shall monitor flow and sample at outfall 001 when there is a discharge at outfall 001 to the river and it is physically possible to monitor and sample that outfall; and the Permittee shall monitor flow and/or sample at outfall 002 at the clarifier effluent at times when outfall 001 is impossible to monitor and/or sample due to flood conditions, as specified in the special condition concerning monitoring location. The Permittee shall provide markers at outfall 001 which indicate the elevations at which monitoring and sampling will be conducted at outfall 001 or conducted at outfall 002, for purposes of determining compliance with the special condition concerning monitoring location. During the period while flow is being monitored at the outfall 002 flow monitoring point (the clarifier flow meters) but there is a discharges at outfall 001, only, the Permittee shall conduct sampling at outfall 001 and calculate the flow at outfall 001 by combining daily average flows from the Village of Roxana with the flow monitored at the outfall 002 flow monitoring point (the clarifier flow meters). The Aquathol and Hydrothol Products presented in the permit application may be applied when algae blooms threaten the clarity of the lagoon that discharges to outfall 001, or the stormwater retention area that discharges to outfall 003. From the results of a mixing zone delineation study conducted by the Permittee (and reviewed by this Agency) on the Mississippi River dated May 17, 1991, it is recognized that adequate mixing exists (in compliance with 35 IAC 302.102) for the parameters indicated in the permit. The Permittee shall monitor and sample at outfall 002 at other times when the polishing lagoons are physically bypassed; the polishing lagoons may only be physically bypassed during lagoon maintenance or when there is an unplanned event beyond the Permittee's control. The Agency has conducted a monitoring reduction review and the effluent sample frequency for BOD_5, TSS, oil & grease, phenols, chromium (total) and chromium (hexavalent) at outfall 001 will be reduced due to sustained compliance; the permit will be modified (Without Public Notice) to increase the monitoring frequency for these parameters if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The permit may be modified as a result of the required analyses at outfall 003 (after public notice and opportunity for hearing) to include more frequent sampling for these required parameters, as well as sampling requirements for additional parameters at outfall 003. The stormwater retention area that discharges to outfall 003 shall not be used for the purposes of spill containment. In the event the Permittee incurs a tank dike overflow which results in a discharge to the previously indicated storm water retention area, the Permittee shall implement measures to prevent this area from discharging to outfall 003, if possible. The Permittee will also be required to submit a comprehensive mitigation plan if a tank dike overflow occurs which results in a discharge to the southwest property stormwater retention area, as required in the special condition concerning the previously indicated stormwater retention area that discharges to outfall 003. The permittee may use dyes on an as needed basis to aid in diagnosing sewer or other equipment problems, or for equipment hydrostatic testing; dyes may also be present in hydro treating waters received from off-property sources. The Permittee shall take reasonable precautions to minimize any impact of dyes on the color of discharges at outfalls 001 and 002.

Attached please find the Antidegradation for ConocoPhillips Wood River Refinery.

Antidegradation Assessment ConocoPhilips Wood River Refinery
(Formerly Toscopetro Refinery and Shell Oil Refinery)
NPDES Permit No. IL0000205 Madison County

The subject facility has applied for an NPDES permit that would accommodate changes and growth at the existing refinery. Two outfalls discharge process wastewater and are affected by these changes. Outfall 001 is to the Mississippi River and contains the process wastewater during periods when the river is not at flood stages. It also contains the Village of Roxanna's sewage treatment wastewater. The Village is currently in negotiations with the Agency for construction of an independent wastewater treatment plant that would divert this wastewater from the refinery. Lagoons serve as the final stage of treatment for wastewater discharged through Outfall 001. Outfall 002 contains the same wastewaters and discharges to the Mississippi the difference being that during periods of high Mississippi River stage, the effluent is monitored at Outfall 002 prior to being discharged to the lagoons. Outfall 002 does not contain the Roxanna wastewater because it is discharge directly to the lagoons.

ConocoPhilips will purchase a portion of a closed neighboring refinery, Premcor Hartford Refinery. This will increase the throughput of crude oil through the subject refinery from 310 thousand bbls per day to 323 thousand bbls per day. These added units will increase the flow of the refinery wastewater by 0.4 MGD bringing the total flow of Outfall 001 from 7.09 MGD to 7.49 MGD. Likewise, the flow out of Outfall 002 will go from 6.84 to 7.24 MGD. The difference in flows from Outfall 001 to 002 is accounted for by the absence of the Roxanna municipal effluent from Outfall 002.

In addition to the acquisition of the Premcor units, changes are proposed in the operation and products made at the refinery that will influence loadings of pollutants in the wastewater. These are: 1) Startup of a new low sulfur gasoline manufacturing facilities. 2) Startup of Hartford coking, distilling and desalting units. 3) Startup of new ultra-low diesel fuel manufacturing facilities, and 4) Startup of new low-sulfur gasoline manufacturing facilities part 2. The first two projects are due to come on-line this fall and the others are scheduled for 2006. The permit is to be written with specific load limits for the time periods prior to the startup of each of these projects as well as at the addition of the Premcor units.

Identification and Characterization of the Affected Water Body.

The Mississippi River (segment J-05) has a 7Q10 flow of 21,620 cfs and is a General Use water. The stream is listed on the 2002 Illinois 303(d) list. Overall, aquatic life and fish consumption uses are only partially supported in this segment. The potential causes of impairment are listed as PCBs, siltation, suspended solids, metals, nutrients, phosphorus, inorganic N (nitrates) and nitrates. The potential sources of the noted impairment are industrial point sources, municipal point sources, agriculture, crop related sources, non-irrigated crop production, hydrologic/habitat modification and sources unknown. It is not rated under the Agency's Biological Stream Characterization (BSC) system. The stream is not listed as a biologically significant stream in the 1992 Illinois Natural History Survey Publication *Biologically Significant Illinois Streams*. The IDNR WIRT system lists no threatened or endangered species as inhabiting the receiving stream.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The increased throughput of crude oil that will take place when the Premcor Hartford units are added to the ConocoPhilips refinery means that more loading will exist to the wastewater treatment plant and thence to the

river. Parameters that will see increased loading are BOD, TSS, COD, oil & grease, phenols, sulfides and ammonia. Different refining techniques, employed to produce fuel products required under clean air laws, may also result in slightly higher (or slightly lower) loadings of pollutants to the treatment plant (see the itemized changes above). As each new process is begun, a new set of loading limits will take effect in the permit. Depending on federal categorical limits and state effluent standards, the calculation of load limits causes slight variations in the permit load limits (concentration limits stay the same). Increases in loading from all other changes at the refinery are insignificant except for the addition of the units from the Premcor acquisition.

The wastewater treatment plant at ConocoPhilips is capable of providing adequate treatment for the new loadings. Water quality standards will be met in the receiving stream. Most of the increased loading is due to the acquisition of the additional units from a defunct refinery. These loads to the Mississippi River previously existed when the Premcor refinery was operating.

Fate and Effect of Parameters Proposed for Increased Loading.

The BOD and ammonia discharged by this facility will decay into simpler and harmless byproducts by naturally occurring organisms in the receiving stream. Some of the nitrogen originating in the ammonia will remain in the stream in the form of nitrates or organic nitrogen. Some of the nitrates not absorbed into the biota will be denitrified. Ammonia and dissolved oxygen standards will not be exceeded by this discharge.

Purpose and Anticipated Benefits of the Proposed Activity.

The changes proposed allow the refinery to help meet the local demand for fuel and to provide fuel products that meet clean air regulations. The local community will benefit from cleaner air. Jobs will be retained because the facility will continue refining.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

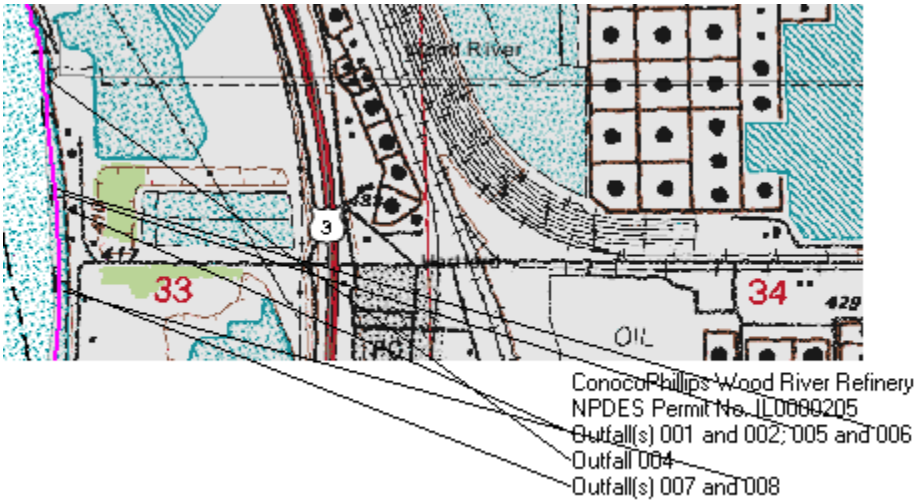
The modifications to the refinery and the processes carried on therein are being added to an existing infrastructure. This infrastructure cannot be abandoned for economic reasons. The existing wastewater treatment plant is capable of meeting all applicable limits. There are no reasonable alternatives for treatment.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

IDNR was sent a copy of the application on August 4, 2003. No reply has yet been received.

Agency Conclusion.

This assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard). We find that the proposed activity will result in the attainment of water quality standards. All existing uses will be fully protected. All technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity. This activity will benefit the community at large by providing fuel that meets clean air requirements and by the continued jobs the refinery will maintain. The proposed activity is therefore compliant with the Antidegradation standard.


Wood River
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OIL
ConocoPhillips Wood River Refinery
NPDES Permit No. IL0000205
Outfall(s) 001 and 002; 005 and 006
Outfall 004
Outfall(s) 007 and 008

Public Notice of Draft Permit

Public Notice Number FLR:02073103.bah is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft renewed National Pollutant Discharge Elimination System (NPDES) Permit Number IL0000205 has been prepared under 40 CFR 124.6(d) for ConocoPhillips Wood River Refinery, Post Office Box 76, Roxana, Illinois 62084 for discharge into the Mississippi River for outfalls 001, 002, 004, 005, 006, 007 and 008; and into an unnamed ditch tributary to Grassy Lake tributary to Cahokia Canal for outfall 003 from the ConocoPhillips Wood River Refinery, 900 South Central Avenue, Roxana, Illinois 62084, Madison County. The applicant operates an existing petroleum refinery (SIC 2911) to produce gasolines, fuel oil, asphaltic products and propane. The lube processing units were removed in 1999. The facility currently processes approximately 310,000 barrels of crude oil per stream day. Upon commencement of operation and integration of the former Premcor Hartford Refinery Units, the crude oil production will be increased, and they will process approximately 323,000 barrels of crude oil per stream day.

The provisions of the Petroleum Refining Point Source Category (40 CFR 419) apply to the refinery operations. The provisions of Subpart D - Lube Subcategory of 40 CFR 419 previously applied to the refinery operations and were previously used to calculate production based load limits (lbs/day). Following removal of the lube processing units, the provisions of Subpart B - Cracking Subcategory of 40 CFR 419 now apply to the refinery operations and will be used to calculate the production based load limits (lbs/day).

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 A.M. and 3:30 P.M. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

SAK:FLR:02073103.bah

NPDES Permit No. IL0000205

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

ConocoPhillips Wood River Refinery
Post Office Box 76
Roxana, Illinois 62084

Facility Name and Address:

ConocoPhillips Wood River Refinery
900 South Central Avenue
Roxana, Illinois 62084
(Madison County)

Discharge Number and Name:		Receiving Waters
001	Treated process, sanitary and stormwater, including effluent from Roxana STP and Air Liquide	Mississippi River
002	Treated process, sanitary and stormwater, including effluent from Air Liquide	Mississippi River
003	Stormwater runoff from southwest property	Unnamed ditch tributary to Grassy Lake tributary to Cahokia Canal
004	Stormwater runoff from north drainage ditch (docks area)	Mississippi River
005	Stormwater runoff from east drainage ditch (docks area)	Mississippi River
006	Stormwater runoff from north drainage ditch (docks area)	Mississippi River
007	Stormwater runoff from south drainage ditch (docks area)	Mississippi River
008	Stormwater runoff from southwest paved road (docks area)	Mississippi River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:BAK:FLR:02073103.bah

NPDES Permit No. IL0000205

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
	Outfall(s): 001****					
Flow (MGD)	See Special Condition 8				Daily	Continuous
pH	See Special Condition 1				2/week	Grab
Temperature	See Special Condition 2				2/week	Grab
BOD_5*****	1249	4,761	20	40	2/month	Composite
Total Suspended Solids (TSS)*****	2452	4085***	25	50	2/month	Composite
COD******	20980	40968			1/month	Composite
Oil and Grease*****	867.1***	1626***	15	30	2/month	Composite*
Phenols*****	16.69***	40.11***	0.3	0.6	1/month	Composite
Ammonia (as N)*****	1635	3600			1/month	Composite
Sulfides*****	15.72	35.23			2/month	Composite
Chromium (Total)*****	18.59***	53.48***	1.0	2.0	2/month	Composite
Chromium (Hexavalent)*****	1.53***	3.42***	0.1	0.2	2/month	Composite** (12-Hour)

*See Special Condition 3.
**See Special Condition 4.
***See Special Condition 11.
****The limits and monitoring/reporting requirements on this page apply to outfall 001 only during months when there is a discharge from outfall 001 and not outfall 002. See Special Conditions 5, 19, 20, 24, and 30.
*****See Special Condition 27.
******See Special Conditions 11 and 27.

NPDES Permit No. IL0000205

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 002****						
Flow (MGD)	See Special Condition 8				Daily	Continuous
pH	See Special Condition 1				2/week	Grab
Temperature	See Special Condition 2				2/week	Grab
BOD_5	1208	4552	20	40	2/week	Composite
Total Suspended Solids (TSS)	2388	3743***	25	50	2/week	Composite
COD***	20821	40190			2/week	Composite
Oil and Grease	867.1***	1626***	15	30	1/week	Composite*
Phenols	16.69***	40.11***	0.3	0.6	2/week	Composite
Ammonia (as N)	1626	3579			2/week	Composite
Sulfides	15.72	35.23			2/week	Composite
Chromium (Total)	18.59***	53.48***	1.0	2.0	2/week	Composite
Chromium (Hexavalent)	1.53***	3.42***	0.1	0.2	2/week	Composite** (12-Hour)

*See Special Condition 3.
**See Special Condition 4.
***See Special Condition 11.
****The limits and monitoring/reporting requirements on this page apply to outfall 002 only during months when there is a discharge from outfall 002 and not outfall 001. See Special Conditions 5, 20, 23, 24, and 30.

NPDES Permit No. IL0000205

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 001*****/002*****						
Flow (MGD)	See Special Condition 8				Daily	Continuous
pH	See Special Condition 1				2/week	Grab
Temperature	See Special Condition 2				2/week	Grab
BOD_5****	1249	4761	20	40	2/month****	Composite
Total Suspended Solids (TSS)****	2452	4085***	25	50	2/month****	Composite
COD******	20980	40968			1/month****	Composite
Oil and Grease****	867.1***	1626***	15	30	2/month****	Composite*
Phenols****	16.69***	40.11***	0.3	0.6	1/month****	Composite
Ammonia (as N)****	1635	3600			1/month****	Composite
Sulfides****	15.72	35.23			2/month****	Composite
Chromium (Total)****	18.59***	53.48***	1.0	2.0	2/month****	Composite
Chromium (Hexavalent)****	1.53***	3.42***	0.1	0.2	2/month****	Composite** (12-Hour)

*See Special Condition 3.
**See Special Condition 4.
***See Special Condition 11.
****The sample frequency for BOD_5, TSS, Sulfides, Chromium (Total), and Chromium (Hexavalent) shall be 2/month at outfall 001 and 2/week at outfall 002, during months when there is a discharge from both outfalls 001 and 002; the sample frequency for Oil & Grease shall be 2/months at outfall 001 and 1/week at outfall 002, during months when there is a discharge from both outfalls 001 and 002; and the sample frequency for COD, Phenols and Ammonia (as N) shall be 1/month at outfall 001 and 2/week at outfall 002, during months when there is a discharge from both outfalls 001 and 002. The other parameters shall be sampled at the indicated frequency at outfall 001 and 002. See Special Condition 27.
*****The limits and monitoring/reporting requirements on this page apply to outfall 001/002 only during months when there is a discharge from both outfalls 001 and 002. See Special Conditions 5, 19, 20, 21, 23, 24, and 30.
******See Special Conditions 11 and 27.

NPDES Permit No. IL0000205

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 003*						
pH	See Special Conditions 18, 25, and 26				1/Month***	Grab
Oil & Grease**				15	1/month***	Grab
TOC**				110	1/month***	Grab

*See Special Conditions 9, 20, 25, 26, and 29.
**See Special Conditions 10, 25, and 26.
***If discharge occurs during normal sampling period (see Special Condition 29). If no discharge occurs during the normal sampling period, indicate this on the DMR forms.

Outfalls: 004*, 005*, 006*, 007*, and 008*

*See Special Conditions 9 and 17.

Special Conditions

SPECIAL CONDITION 1. The pH shall be in the range 6.0 to 9.0 at outfalls 001 and 002. The monthly minimum and monthly maximum values shall be reported on the DMR forms each month for outfall 001 and outfall 002. For months when the outfall 001 Discharge Monitoring Report (DMR) is used, the outfall 001 pH values shall be reported on the DMR and the outfall 002 pH values are to be reported as a footnote on the outfall 001 DMR; and for months when the outfall 002 DMR is used, the outfall 002 pH values shall be reported on the DMR, and the outfall 001 pH values will not be available for outfall 001 during those months. See Special Condition 21 for reporting the pH value during months when the 001/002 DMR is used. The pH 9 maximum limit may be exceeded at outfall 001 if the elevated pH level is caused entirely by algae in the treatment lagoon(s) that discharge to outfall 001.

SPECIAL CONDITION 2. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

A. Maximum temperature rise above natural temperature must not exceed $5^{o}F$ ($2.8^{o}C$).

B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than $3^{o}F$ ($1.7^{o}C$). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
EF	50	50	60	70	80	87	89	89	87	78	70	57
EC	10	10	16	21	27	31	32	32	31	26	21	14

The temperature shall be reported on the monthly DMR as a maximum value.

SPECIAL CONDITION 3. The composites for oil, fats, and greases shall consist of sample aliquots of approximately equal volume, a minimum of 100 milliliters, be collected at regular time intervals over a eight-hour period (three aliquots total). A single sample formed by combining all the aliquots, and the solvent rinse of the container, would then be analyzed. The results of the single analysis is then reported for oil, fats, and grease.

SPECIAL CONDITION 4. The composites for chromium (hexavalent) shall consist of sample aliquots of approximately equal volume, a minimum of 100 milliliters be collected at regular time intervals over a twelve-hour period (four aliquots minimum).

SPECIAL CONDITION 5.

A. Samples taken in compliance with the effluent monitoring requirements for outfall 001 and 002 shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

B. The Permittee shall monitor flow and sample at outfall 001 when there is a discharge at outfall 001 to the river and it is physically possible to monitor and sample at outfall 001.

The Permittee shall monitor flow and/or sample at outfall 002 at the clarifier effluent at times when outfall 001 is impossible to monitor and/or sample due to flood conditions, as follows:

1. Flow monitoring shall be conducted at outfall 002 when the river elevation exceeds a point 2 feet below the average liquid head above the weir crest.

2. Sampling shall be conducted at outfall 002 when the river is rising and the elevation exceeds a point 4 feet below the bottom of the sample house, or when the river is falling and the elevation exceeds a point 6 feet below the bottom of the sample house.

The Permittee shall provide markers at outfall 001 which indicate the above referenced elevations at which monitoring and sampling will be conducted at outfall 001 or conducted at outfall 002, for the purpose of determining compliance with this Special Condition. In the event the Permittee requires outfall or equipment changes which will result in the adjustment of these elevations, the Permittee shall notify the Agency in writing prior to making these changes.

Special Conditions

During the period while flow is being monitored at the outfall 002 flow monitoring point (the clarifier flow meters) but there is a discharge at outfall 001, only, the Permittee shall conduct sampling at outfall 001 and calculate the flow at outfall 001 by combining daily average flows from the Village of Roxana with the flow monitored at the outfall 002 flow monitoring point (the clarifier flow meters). This calculated flow at outfall 001 shall be used for the purposes of flow and mass reporting on the Discharge Monitoring Reports (DMR's).

Rapidly changing river elevations and response time of personnel to relocate the sampling equipment shall be taken into account when making a determination of whether the Permittee is in compliance with the above. If river elevations temporarily recede below the above indicated elevations after flow monitoring and/or sampling have been switched to outfall 002, the Permittee may elect not to return flow monitoring and/or sampling to outfall 001 if the Corps of Engineers river stage forecast (as measured at Lock and Dam 26 tailwater) predicts elevations greater than the above indicated elevations to recur any time within the next 5 days.

C. Samples taken in compliance with the effluent monitoring requirements for outfall 003 shall be taken at a point representative of the discharge, but prior to entry into the Grassy Lake Area.

SPECIAL CONDITION 6. The permittee shall promptly dredge the receiving waters whenever necessary to remove deposits or obstructions to the navigability of those waters which are found to be attributable to the permitted discharge. Prior to dredging, the permittee shall check with the appropriate Corps of Engineers District to insure compliance with Section 404 of the Clean Water Act.

SPECIAL CONDITION 7. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section

SPECIAL CONDITION 8. The flow shall be reported on the monthly DMR, in million gallons per day (MGD), as a monthly average and maximum value.

SPECIAL CONDITION 9. For the purpose of this permit the discharge from outfalls 003-008 are limited to stormwater, free from process and other wastewater discharges.

SPECIAL CONDITION 10. The permittee shall report the analytical results for TOC and oil and grease as the monthly average and the daily maximum.

SPECIAL CONDITION 11. The discharge credit, if necessary, for contaminated stormwater, as applied to discharges 001 and 002 shall be as follows:

Additional stormwater credit for the following parameters shall be based on quantity of storm flow taken through process treatment:

Pounds Per 1000 Gallons of Stormwater Flow*

Parameter	30 Day Average	Daily Maximum
TSS**		0.28
COD	1.5	3.0
Oil and Grease**	0.067	0.13
Phenols**	0.0014	0.0029
Chromium (Total)**	0.0018	0.0050
Chromium (Hexavalent)**	0.00023	0.00052

Dry Weather Flow: The average flow from the wastewater treatment facility for the last three consecutive zero precipitation days. Previously

Special Conditions

collected stormwater which is sent to process treatment during this period shall not be included in this computation.

*Stormwater Flows: The stormwater runoff which is treated in the wastewater treatment facility is that portion of flow greater than the dry weather flow. Measurement of contaminated stormwater from tank dike areas and previously collected may also be used in computing stormwater credit.

The stormwater credit does not allow the permittee to exceed the concentration limits contained in the effluent limitations and monitoring pages.

In computing monthly average permit limits to include stormwater credit, the mass credit calculated above shall be averaged along with process load limits over the 30 day period. Explanatory calculations and flow data shall be submitted with Discharge Monitoring Reports.

**The permittee shall not exceed the following load limits at any time during months when there is a discharge from outfall 001 and not outfall 002 and during months when there is a discharge from both outfalls 001 and 002:

Parameter	30 Day Average (Lbs/Day)	Daily Maximum (Lbs/Day)
TSS	2452	5951
Oil and Grease	937	3570
Phenols	18.74	71.4
Chromium (Total)	59.13	238
Chromium (Hexavalent)	5.91	23.8

**The permittee shall not exceed the following load limits at outfall 002 at any time during months when there is a discharge from outfall 002 and not outfall 001:

Parameter	30 Day Average (Lbs/Day)	Daily Maximum (Lbs/Day)
TSS	2388	5690
Oil and Grease	906	3414
Phenols	18.11	68.3
Chromium (Total)	57.05	228
Chromium (Hexavalent)	5.71	22.8

SPECIAL CONDITION 12. The permittee shall prepare a preliminary plan for biomonitoring at outfall 001 and submit the plan to IEPA for review and approval within 90 days of the effective date of this permit. The permittee shall begin biomonitoring of the effluent discharge at outfall 001 within 90 days after approval of the biomonitoring plan or other such date as contained in the Agency's notification letter.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Except as noted here and in the IEPA document "Effluent Biomonitoring and Toxicity Assessment", testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fourth Ed.) EPA-600/4-90-027F. Results shall be reported in accordance with Section 12. Unless substitute tests are pre-approved; the following tests are required:

    a. Fish - 96 hour static or static renewal LC_{50} Bioassay using one to 14 day old fathead minnows (Pimephales promelas).

    b. Invertebrate 48-hour static LC_{50} Bioassay using Ceriodaphnia.

2. Testing Frequency - The above tests shall be conducted on a yearly basis for the remainder of the permit within 90 days following approval of the biomonitoring plan or other such date as contained in the Agency's notification (approval) letter. Tests shall be performed using 24-hour composite effluent samples unless otherwise authorized by the Agency. Results shall be submitted to IEPA within 1 week of becoming available to the permittee.

Special Conditions

3. Toxicity Assessment - Should the review of the results of the biomonitoring program identify toxicity, the Agency may require that the permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The permittee shall submit to the Agency its plan for toxicity reduction evaluation within 90 days following notification by the Agency. The permittee shall implement the plan within 90 days or other such date as contained in a notification letter received from the Agency.

   The Agency may modify this permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the Agency may modify this permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 13. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit, after public notice and opportunity for hearing, in accordance with the more stringent standard or prohibition. In addition to newly promulgated effluent standards or limitations, if new information is received by this Agency that was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance, the Agency shall revise or modify the permit, after public notice and opportunity for hearing, to address the new information.

SPECIAL CONDITION 14. The bypass and upset provisions in 40 CFR 122.41 (m) and (n) are applicable to this permit.

SPECIAL CONDITION 15. The use and operation of the wastewater treatment facilities shall be under the supervision of a certified Class K operator.

SPECIAL CONDITION 16. For the duration of this permit, the permittee shall determine the quantity of waste activated sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The permittee shall maintain adequate records of the quantities of waste activated sludge produced and have said records available for Agency inspection. The permittee shall submit to the Agency, at a minimum, a semi-annual summary report of the quantities of waste activated sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the Agency by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Planned Changes. The permittee shall give notice to the Agency on the semi-annual report of any changes in sludge use and disposal.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section, Compliance Assurance Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 17.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) for outfalls 004 - 008

A. A storm water pollution prevention plan shall be developed by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.

B. The plan shall be completed within 180 days of the effective date of this permit. Plans shall provide for compliance with the terms of the plan within 365 days of the effective date of this permit. The owner or operator of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request. [Note: If the plan has already been developed and implemented it shall be maintained in accordance with all requirements of this special condition.]

Special Conditions

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph G of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.

2. A site map showing:

   i. The storm water conveyance and discharge structures;

   ii. An outline of the storm water drainage areas for each storm water discharge point;

   iii. Paved areas and buildings;

   iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.

   v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);

   vi. Surface water locations and/or municipal storm drain locations

   vii. Areas of existing and potential soil erosion;

   viii. Vehicle service areas;

   ix. Material loading, unloading, and access areas.

3. A narrative description of the following:

   i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;

   ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;

   iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;

   iv. Industrial storm water discharge treatment facilities;

   v. Methods of onsite storage and disposal of significant materials;

4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.

5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.

6. A summary of existing sampling data describing pollutants in storm water discharges.

F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.

2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.

3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.

5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:

i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;

ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;

iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;

iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.

v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination;

vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.

6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.

7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.

Special Conditions

G. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.

H. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.

I. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.

J. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

Construction Authorization

K. Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.

2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

3. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.

4. Construction activities which result from treatment equipment installation, including cleaning, grading and excavation activities which result in the disturbance of five acres or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

L. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).

M. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.

N. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Special Conditions

O. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

SPECIAL CONDITION 18. The pH shall be in the range 6.0 to 9.0 at outfall 003. The monthly minimum and monthly maximum values shall be reported on the DMR form. The pH 9 maximum limit may be exceeded if the elevated pH level is caused entirely by algae in the stormwater retention area that discharges to outfall 003.

SPECIAL CONDITION 19. The Aquathol and Hydrothol products presented in the permit application may be applied when algae blooms threaten the clarity of the lagoon that discharges to outfall 001, or the clarity of the stormwater retention area that discharges to outfall 003. These products shall not be applied at rates that would cause violations of water quality standards in 35 Ill. Adm. Code, Part 302.

SPECIAL CONDITION 20. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities (Outfalls 001, 002 and 003) for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 21. For those months when there is a discharge from both outfalls 001 and 002, the monthly average and daily maximum concentration and load limits on page 4 of this permit shall apply to the combination of results from both outfalls 001 and 002. For the purpose of determining compliance with this special condition, the Permittee will be allowed to follow its normal sampling schedule for each outfall. The day the sample was taken, the outfall the discharge occurred, the flow, pH, the concentration and load for each parameter shall be indicated and submitted as an attachment to the monthly DMR's.

SPECIAL CONDITION 22. The Agency has reviewed a mixing zone delineation study conducted by the permittee on the Mississippi River in the vicinity of this effluent outfall dated May 17, 1991. From the results of that study and the Agency's own modeling, it is recognized that adequate mixing exists in compliance with 35 Ill. Adm. Code 302.102 for the following parameters: pH, ammonia (total and un-ionized), phenols, TDS, chloride, hexavalent chromium, zinc (dissolved), sulfate and fluoride. Of these parameters, a zone of initial dilution is recognized for hexavalent chromium and un-ionized ammonia. The limits given for these parameters were established to result in compliance with the water quality standards of 35 Ill. Adm.. Code Part 302 outside of these mixing zones and zones of initial dilution. All parameters known to be present in this effluent at levels above water quality standards are listed above. Other such parameters may be discovered in the future and will be evaluated for mixing according to the Illinois Permitting Guidance of Mixing Zones.

SPECIAL CONDITION 23. The permittee shall monitor and sample at outfall 002 at times when the polishing lagoons are physically bypassed, either by pump-around of the lagoons or by other means of discharging from the clarifiers directly to the river. The polishing lagoons may only be physically bypassed during lagoon maintenance or when there is an unplanned event beyond the permittee's control. When the lagoons are physically bypassed, the permittee shall indicate the day(s) of the month the lagoons are bypassed and the reason(s) for bypass, on an attachment to the monthly DMR's.

SPECIAL CONDITION 24. For months when there is a discharge from outfall 001 and not outfall 002, the permittee shall indicate "no discharge" on the outfall 002 monthly DMR and "not applicable" on the outfall 001/002 monthly DMR. For months when there is a discharge from outfall 002 and not outfall 001, the permittee shall indicate "no discharge" on the outfall 001 monthly DMR and "not applicable" on the outfall 001/002 monthly DMR. For months when there is a discharge from both outfalls 001 and 002, the permittee shall indicate "not applicable" on both the outfall 001 and outfall 002 monthly DMR's.

SPECIAL CONDITION 25. The permit may be modified as a result of the indicated analyses to include more frequent sampling for pH, oil and grease and TOC, as well as sampling requirements and limitations for additional parameters along with the appropriate sampling frequencies. Modifications under this Special Condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 26. The storm water retention area that discharges to outfall 003 shall not be used for the purposes of spill containment.

In the event the permittee incurs a tank dike overflow which results in a discharge to the above indicated southwest property storm water retention area, the permittee shall implement measures to prevent this area from discharging to outfall 003, if possible.

Special Conditions

The permittee shall also submit to this Agency a comprehensive mitigation plan if a tank dike overflow occurs which results in a discharge to the southwest property storm water retention area. This plan shall provide documentation that immediate clean-up has commenced, documentation of any spills to that area that have occurred and materials spilled since the effective date of this permit, and the date in which the Permittee expects clean-up to be completed. This plan shall be submitted to this Agency within 90 days of the date of the tank dike overflow.

The Permittee shall notify the Agency in writing after clean-up has been completed. This notification shall include documentation that the above referenced mitigation plan has accomplished clean-up. This notification shall be submitted to the permit Section at the address indicated in Special Condition 7.

In the event the Permittee incurs a tank dike overflow which results in a discharge to the previously referenced stormwater retention area, the Permittee shall sample for pH, oil & grease and TOC on a daily basis when discharging until clean-up has been completed. At such time clean-up has been completed, the sample frequency for these parameters at outfall 003 shall be monthly when discharging. The date in which clean-up has been completed shall be indicated on the DMR form for the month in which clean-up was completed.

The permit may be modified as a result of these analyses to include sampling requirements and limitations for additional parameters at outfall 003 and include the appropriate sampling frequencies. Modifications under this Special Condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 27. The Permittee has undergone a monitoring reduction review and the effluent sample frequency for BOD_5, TSS, COD, Oil & Grease, Phenols, Ammonia (as N), Sulfides, Chromium (Total) and Chromium (Hexavalent) at outfall 001 has been reduced due to sustained compliance. The IEPA will require that the effluent sample frequency for Oil & Grease at outfall 001 be increased to the frequency of 1/week, and that the effluent sample frequency for the other parameters listed above at outfall 001 be increased to the frequency of 2/week, if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring frequency will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

SPECIAL CONDITION 28. The Permittee may use dyes on an as needed basis to aid in diagnosing sewer or other equipment problems, or for equipment hydrostatic testing. Dyes may also be present in hydrotreating waters received from off-property sources. The Permittee shall take reasonable precautions to minimize any impact of dyes on the color of the discharges (at outfall 001 and 002) which may result from such use of dyes, which shall be below obvious levels.

SPECIAL CONDITION 29. Sampling at outfall 003 shall be done during normal daytime business hours only, Monday through Friday.

SPECIAL CONDITION 30. BOD_5, TSS, COD, Oil and Grease, Phenols, Ammonia (as N), Sulfides, Chromium (Total) and Chromium (Hexavalent) shall be reported in mg/L as monthly average and daily maximum concentrations and in lbs/day as monthly average and daily maximum loads.